

**Qualitative Content Analysis of News Coverage about Meat and Livestock Australia's
Carbon Neutral 2030 Initiative**

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Introduction

In November 2017, Meat & Livestock Australia (MLA) – the research and development corporation for Australia's red meat industry – set the commitment for Australia to become the world's first carbon neutral red meat industry by 2030 (Crowley, 2022), now known as CN30. Driven by research, development, and collaboration, achieving carbon neutrality will not only help the environment, but also solidify the quality and integrity of Australian red meat around the world (MLA, 2020). The push to achieve carbon neutrality is also aimed at improving consumers' opinion of the environmental footprint of red meat through strategic scientific communications as Australian consumers are becoming increasingly aware and critical of the environmental impacts of the food they consume, with red meat being particularly susceptible (MLA, 2020; Red Meat Advisory Council, 2023). Providing educational communications to consumers aligns with the American Association for Agricultural Education's research value of Advancing Public Knowledge of AFNR Systems (AAAE, 2023).

Theoretical Framework

Framing served as the theoretical framework for this study. Erving Goffman's (1974) framing theory helps understand how content is perceived or understood by individuals. Framing can depict topical media positively or negatively when presented to the intended audience (Tversky & Kahneman, 1981). Framing communications can help shape the opinion of the intended audience (Steede et al., 2020), specifically when it comes to contentious issues. Climate change is often under framing scrutiny due to its highly politicized nature within the press (Effrosynidis et al., 2022). Framing has been applied to climate change and climate mitigation strategies across the world (Orton, 2021; Wang & Altiparmak, 2022), but not carbon neutrality from an Australian perspective. Therefore, it is important to determine how carbon neutrality is being framed within the Australian media.

Purpose & Research Questions

This study's purpose was to explore how MLA's CN30 initiative was presented in Australian newspapers. The specific research questions were: 1) What types of articles included coverage about the initiative?; and 2) What emergent frames existed in that coverage?

Methods

This study conducted a qualitative content analysis of Australian newspaper articles published about MLA's CN30 initiative. Qualitative content analysis focuses on a given topic and looks for similarities and differences within the data set (Graneheim et al., 2017). These nuances can be used to develop frames in which to analyze or interpret the data (Orton, 2021). Articles were collected using the Australia & New Zealand Newsstream database. Search parameters were for articles from 2017-2022 that included one of the following keywords: Meat & Livestock Australia or MLA *and* CN2030, CN30, or carbon neutral. Fifty-one articles containing the keywords were retrieved from the database. After duplicate articles were removed, 38 articles were available for qualitative analysis. Two coders independently read each article and made individual notes regarding the emergent frame in reference to how the CN30 initiative was addressed in the article. The first coder provided an initial suggestion for each article's frame and the second coder then reviewed those suggestions and made additional comments. The coders then met to discuss all the articles to reach agreement regarding the emergent frames.

Results

The 38 articles appeared in both mainstream ($n = 8$) and agricultural newspapers ($n = 30$). As each article was carefully read, it was classified as either News, Feature, or Opinion. The qualitative data analysis process indicated of the 38 articles in the sample, 27 were news stories that contained brief updates about the CN30 initiative. Ten articles were feature stories that dedicated more attention to the human-interest aspect of the story, typically by highlighting how farmers were implementing specific strategies to reach carbon neutrality. The remaining one article was an opinion piece, which conveyed a particular viewpoint about the initiative. The qualitative content analysis process identified six emergent frames: *commitment to reaching the goal*, *pathways to reaching the goal*, *announcing the “ambitious” plan*, *CN30’s contribution to other efforts*, *skepticism about the plan*, and *the initiative’s relevance to dietary choices*.

The most prevalent frame identified was *commitment to reaching the goal*, found in 12 articles. These articles discussed the CN30 initiative as an example of the industry’s commitment to reaching carbon neutrality, but often did not provide specific details about how that is being done. This frame often highlighted Australian agricultural companies ensuring they were doing their part to reduce their carbon footprint. Another emergent frame, *pathways to reaching the goal*, was identified in 11 articles. This frame was present in articles that drew attention to the CN30 initiatives currently underway such as commercialization of red asparagopsis, soil carbon, and identifying genetic markers. The frame was used to connect the CN30 initiative to other efforts to address sustainability concerns in the red meat industry, specifically about methane production. Eight articles contained the frame of *announcing the “ambitious” plan*. These articles were released early in the study’s timeframe to share news of the Australian red meat industry’s CN30 initiative, which specifically labeled the plan as “ambitious” and generated more recognition of the industry’s efforts. The fourth frame, *CN30’s contribution to other efforts*, highlighted how the CN30 initiative was part of the Australian agricultural industry’s efforts to address climate change. The three articles with this frame positioned CN30 within a larger framework of initiatives aimed at reducing greenhouse gas emissions. The final two themes (*skepticism about the plan* and *the initiative’s relevance to dietary choices*) were each found in two articles. These frames questioned the achievability of CN30 and how the production of red meat as a protein choice may impact climate change. While not exclusively negative, these articles presented alternative viewpoints to the previous frames.

Discussion, Conclusions & Recommendations

This study examined one specific initiative in agriculture, MLA’s CN30, to address the significant issue of climate change. While articles at the beginning of the study’s timeframe focused on announcing the “ambitious” plan, content about the CN30 initiative eventually became more varied with frames highlighting specific strategies to reach the goal and using the initiative as evidence of the red meat industry’s broader commitment to address climate change. How content is framed, particularly about contentious issues such as climate change, can influence how people interpret that information and form opinions (Effrosynidis et al., 2022; Wang & Altiparmak, 2022). The results indicated that while the CN30 initiative had some criticism, it was predominantly presented as a positive endeavor and shared as evidence of the red meat industry’s dedication to addressing climate change. Future research should include a larger dataset to explore how other sustainable agricultural practice campaigns are being presented through media coverage.

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